

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 10, line 10, with the following rewritten paragraph:

--Hereinafter, preferred embodiments of the present invention will be described with referring reference to accompanying drawings. However, the present invention is not limited to these embodiments. --

Please replace the last paragraph on page 13, beginning at line 17, with the following rewritten paragraph:

-- Preferably, at least part of the PEN fiber is coated with a second thermosetting resin. As the second thermosetting resin, a thermosetting resin other than the above-mentioned impregnating resin can be appropriately selected. In the case where the PEN woven fabric is impregnated with an unsaturated polyester resin, preferred examples of the second thermosetting resin include an epoxy resin and a melamine resin. Since wettability of the surface of the PEN fiber with the unsaturated polyester resin would be improved by coating the PEN fiber with an epoxy resin or a melamine resin, a reinforced degree of the unsaturated polyester resin with the PEN fiber would be significantly increased. As a result, a loudspeaker diaphragm having an excellent Young Young's modulus can be obtained. On the other hand, since the coated PEN fiber and the unsaturated polyester resin appropriately slip each other when a diaphragm is vibrated, an appropriate internal loss is maintained. Such coating is performed by a usual impregnating operation. A coating amount is adjusted by varying an amount of an impregnating resin. ~~An preferred~~ A preferred example of the coating amount of the resin is 3 to 7 parts by weight and more preferably in the vicinity of 5 parts by weight based on 100 parts by weight of the base layer. --

Please replace the paragraph beginning at page 16, line 1, with the following rewritten paragraph:

-- Examples of a resin constituting the thermoplastic resin layer include nylon (such as nylon-6 or nylon-66), polyester (such as polyethylene terephthalate or polybutylene terephthalate), polyolefin (such as polyethylene, ultrahigh molecular weight polyethylene, polypropylene or poly(4-methyl-1-pentenel)), poly(4-methyl-1-pentenel)), polystyrene, polyvinyl chloride, polyurethane, polysulfone, polyether ketone, polyether ether ketone, polyacetal, polyalylate, polyamide, polyamideimide, polycarbonate, modified polyphenylene

ether, polyphenylene sulfide, polyacrylate, polymethyl methacrylate, polyether imide, polyether sulfone, polytetrafluoroethylene, a liquid crystal polymer and a thermoplastic elastomer. These can be used alone or in blend. A copolymer obtained from two or more monomers of these resins can also be used. Polyester, nylon and polyolefin are preferred. Nylon and polyolefin are especially preferred. This is because these resins have an excellent periodic damping property. --

Please replace the last paragraph on page 16, beginning at line 17, with the following rewritten paragraph:

-- Preferably, the thermoplastic resin layer 2 has a finely foamed structure. An average diameter of a cell in the finely foamed structure is preferably 10 to 60 μm , more preferably 20 to 50 μm , and most preferably 30 to 40 μm . If the thermoplastic resin layer 2 has a finely foamed structure, it is possible to provide a loudspeaker diaphragm ~~having an excellent~~ having excellent mechanical strength in spite of having light weight. Especially, such a fine cell is advantageous for improving durability and reliability. In addition, since such a fine cell has an effect of increasing an internal loss ($\tan \delta$) which is very is a very important factor for an audio component, it is possible to reduce unnecessary sound which is radiated when a diaphragm is vibrated. Cell density of the finely foamed structure is preferably 10^9 to 10^{15} cell/ cm^3 and more preferably 10^{10} to 10^{14} cell/ cm^3 . An expansion ratio corresponding to such cell density is approximately 1.2 to 3.0. If the thermoplastic resin layer has such cell density, a balance between mechanical strength and weight can be further improved. --

Please replace the paragraph beginning at page 31, line 8, with the following new paragraph:

-- As is apparent from Fig. 7B, a base layer of a diaphragm according to the present invention substantially forms a three-layer structure including a resin layer, a PEN woven fabric layer, and a cotton fabric and resin layer. In contrast, according to the diaphragm in Comparative Example 1, shown in Fig. 7A, a binder resin is incorporated into a space between the fibers constituting the woven fabric. It is conceivable that a loudspeaker diaphragm according to the present invention has a superior internal loss due to a substantially laminated structure of the base layer and that the diaphragm has a superior

Application. No. 10/730,162
Paper dated June 27, 2006
Reply to Office Communication of March 29, 2006
Attorney Docket No. 4444-032065

Young Young's modulus due to extremely large weave density of the PEN fiber and existence of an appropriate amount of the binder resin in the vicinity of the PEN fiber. --